Reviewer's report

Title: A Comparative Assessment of Alternatives to the Full-Leg Radiograph for Determining Knee Joint Alignment

Version: 1 Date: 30 August 2011

Reviewer number: 2

Reviewer's report:

- Major Compulsory Revisions

As the authors write in their discussion, multiple previous studies (including some that weren’t mentioned by the authors) have investigated the correlation between the anatomic and the mechanical axis and several clinical methods. The authors do need to clarify how their study is different from the previous studies. The paper could therefore benefit from a paragraph clearly explaining why their study is new. This should be added to the introduction.

The methods are well explained.

Specific recommendations:

The authors should add in information about the reproducibility of all of their methods for their specific investigators.

The authors should explain the reason for the BMI cut-off. 32 doesn’t have any relationship with the different categories of BMI?

The authors are using parametric statistical test will it is unclear if their data is normally distributed. It seems quite unlikely that their data is normally distributed as only 30% had valgus alignment. Did the authors check for normal distribution?

The discussion is currently lacking reflection. The discussion is too much of a summary of all previous literature whoever the authors summarize or relate previous findings with their own results.

Level of interest: Reject as not of sufficient priority to merit publishing in this journal

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.